

ABSTRACT OF THE DISCLOSURE

A rate adjustment scheme. Two pairs of slightly oversized buffers are utilized
5 as jitter buffers. While a pair of buffers are dispensing and gathering audio input and
audio output samples, another pair of buffers function as encoder/decoder input and
output buffers. The input and output sample buffers work in sample based time
scale by accepting and discharging one sample at a time. The encoder/decoder
buffers are utilized in frame based scale where an entire block of samples is read or
10 written for encoding or decoding. On every frame clock derived from an external
source, the uplink buffers (i.e., the audio input and the encoder input buffers) are
swapped. The downlink buffers (i.e., the audio output and the decoder output
buffers) are also swapped. The rate adjustment takes place seamlessly in the act of
buffer swapping.